Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

MM DD, 2017

Christopher A. Say
Plant Manager
Ardagh Glass Inc.
2201 Firestone Parkway
Wilson, North Carolina 27893

SUBJECT: Air Quality Permit No. 03713T37
Facility ID: 9800155
Ardagh Glass Inc.
Wilson
Wilson County
Fee Class: Title V
PSD Class: Major

Dear Mr. Say:

In accordance with your completed Air Quality Permit Application for the renewal of a Title V permit received October 17, 2016, we are forwarding herewith Air Quality Permit No. 03713T37 to Ardagh Glass Inc. 2201 Firestone Parkway, Wilson, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Wilson County has triggered increment tracking under PSD for PM_{10} SO_2 and NO_x. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from MM DD, 2017 until MM DD, YYYY, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Joseph Voelker, P.E. at (919) 707-8730.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section,
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 - permit and review
Raleigh Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to cover letter to Air Quality Permit Number 03713T37

Table of Changes to Permit No. 03713T36

Existing Condition No.	New Condition No.	Changes
Cover Letter	Cover Letter	▪ Used current shell language, updated permit numbers, dates, etc.
Permit page one	Same	▪ Revised dates, permit numbers, etc. using current shell standards
Insignificant activities list	Same	▪ Added IS-CC, "Carton Coding" ▪ Revised IS-DT3 to 240 gallons ▪ Revised IS-DT4 to 500 gallons ▪ Revised IS-KT1 from tanks to tank ▪ Revised IS-PW to "Parts Washer" ▪ Revised IS-VJ to "Video date coders" ▪ Revised IS-HET-1 to IS-HEC, Hot End Coating Hood ▪ Removed IS-UT3 ▪ Removed IS-DT9 ▪ Revised IS-PCO to read "Proceco Typhoon spray washer" ▪ Revised IS-EG1 to 688 kW maximum power output ▪ Revised IS-EG2 to 692 kW maximum power output ▪ Combined all cooling towers into one ID no., IS-CT ▪ Combine all laser jet coders into one ID No., IS-LJ
Section 1 – Permitted Equipment list	Same	▪ Revised ES-10 from 1600 kW to 1520 kW ▪ Substantially revised the equipment and control device descriptors for the raw material handling operations
GLOBAL	Same	▪ Replaced "assure" with ensure" (except in the General Conditions) consistent with current permitting practice.
2.1 A.3.d	Same	▪ Removed the following language as it is inconsistent with current TV administrative permitting rules: *The Permittee may at anytime, reestablish, through administratively amending this permit consistent with 15A NCAC 02Q .0500, the three-hour block average opacity values contained in Section 2.1 A.1.d above*.
2.1 A.3.e.	Same	▪ Removed the following language as it is inconsistent with current TV administrative permitting rules: *The Permittee may at any time, consistent with the provisions of 40 CFR 60.293(e), reestablish, through administratively amending this permit consistent with 15A NCAC 02Q .0500, the UCL values contained in Section 2.1 A.3.e above.*
2.1 B.3.d	Same	▪ Removed the following language as it is inconsistent with current TV administrative permitting rules: *The Permittee may at anytime, reestablish, through administratively amending this permit consistent with 15A NCAC 02Q .0500, the three-hour block average opacity values contained in Section 2.1 B.3.d above*.

Existing Condition No.	New Condition No.	Changes
2.1 B.3.e.	Same	▪ Removed the following language as it is inconsistent with current TV administrative permitting rules: *The Permittee may at any time, consistent with the provisions of 40 CFR 60.293(e), reestablish, through administratively amending this permit consistent with 15A NCAC 02Q .0500, the UCL values contained in Section 2.1 B.3.e above.*
2.1 A.5	NA	▪ Removed 02D .0530(u) recordkeeping and reporting condition as the 5 year requirement has been met.
2.1 B.5.d.	Same	▪ Consistent with current permitting practice, added a projected actual emissions table for Furnace melter on GF-2. These are not limits but rather a tool to assess if the original projections were correct.
2.1 C.3	Same	▪ The 02D .1111 condition was revised to current permit shell standards, including revising condition numbering, and some language to make it more consistent with the rule. No substantive changes were made.
2.1 D	Same	▪ Substantially revised the equipment and control device descriptors
2.1 D.3c and e	Same	▪ Revised conditions to be consistent with current permitting shell standards. No changes in intent were made.
2.2 B.1	NA	▪ 02D .0958 condition was removed as it is no longer applicable. All references to this rule throughout the permit were removed. This rule now only applies only in non-attainment or maintenance areas.
2.2 B.3	2.2 B.2	▪ In the 02D .1100 condition, revised benzene and formaldehyde hourly emission rates for the GF-1 refiner and forehearth ▪ Simple renumbering
2.2 B.2	2.2 B 1	▪ Simple renumbering
2.3	Same	Global consent decree
IV.7.c.iii.2	Same	▪ For furnace 28 (GF-1), revised ALPR threshold to 198 tpd and the resulting NOx limit during ALPR to 735 lb NOx per day
IV.7.c.iii.4	Same	▪ For furnace 28 (GF-1), revised ALPR NOx limit to 735 lb NOx/day in the equation for the NOx limit during malfunction and revised the NOX limit during malfunction to 2, 940 lb NOx per day
IV.7.c.iii.5	Same	▪ For furnace 28 (GF-1), revised ALPR NOx limit to 735 lb NOx/day in the equation for the NOx limit during maintenance.
Section 3 General Conditions	Same	▪ Section was revised from version 4.0 (12/17/2015) to 5.1(08/03/2017) Changes include: ▪ Condition LL was revised to clarify that the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes. ▪ Condition MM – removed STATE ENFORCEABLE ONLY; added comma after process areas to clarify intent

ATTACHMENT to cover letter to Air Quality Permit Number 03713T37

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-PT1 through IS-PT4	Four propane storage tanks (30,000 gallons capacity each)
IS-FT1 and IS-FT2	Two No. 2 fuel oil storage tanks (500,000 gallons capacity each) for furnace back-up fuel
IS-LT1 and IS-LT2	Two lubrication oil storage tanks (10,000 gallons capacity each)
IS-DT1 and IS-DT2	Two diesel storage tanks (16,000 gallons capacity each)
IS-DT3	One diesel storage tank (240 gallon capacity)
IS-DT4	One diesel storage tank (500 gallon capacity)
IS-DT5	One diesel storage tank (1,000 gallons capacity)
IS-DT6	One diesel storage tank (5,000 gallon capacity)
IS-DT8	One diesel storage tank (12,000 gallon capacity)
IS-KT1	One kerosene storage tank (1,000 gallon capacity)
IS-UT1	One used oil storage tank (8,000 gallon capacity)
IS-AL-1	Annealing lehr- Shop No. 281 (2.58 million Btu per hour maximum heat input
IS-AL-2	Annealing lehr- Shop No. 282 (3.46 million Btu per hour maximum heat input
IS-AL-3	Annealing lehr- Shop No. 283 (4 million Btu per hour maximum heat input
IS-AL-4	Annealing lehr- Shop No. 284 (4.40 million Btu per hour maximum heat input
IS-AL-5	Annealing lehr- Shop No. 291 (3.40 million Btu per hour maximum heat input
IS-AL-6	Annealing lehr- Shop No. 292 (2.45 million Btu per hour maximum heat input
IS-MGO	Mold grinding operations and metal working operations with high efficiency cyclone (28 inches in diameter, CD-17)
IS-CT	Cooling towers
IS-LJ	LaserJet date coders
IS-CE	Cold End bottle sprays
IS-EG1 **GACT Subpart ZZZZ, NSPS IIII**	One No. 2 fuel oil-fired emergency generator (688 kilowatt maximum power output)
IS-EG2* **GACT Subpart ZZZZ, NSPS IIII**	One No. 2 fuel oil-fired emergency generator (692 kilowatt maximum power output)
IS-PW	Parts washer
IS-VJ	Video date coders
IS-SB	Sand blasting operations
IS-OV	Mold preheat ovens
IS-CG	Carton glues
IS-SH/K	Kerosene-fired space heaters (1.74 million Btu per hour maximum heat input combined)
IS-SH/NG	Natural gas-fired space heaters (0.48 million Btu per hour maximum heat input combined)
IS-V-1	Propane-fired vaporizer (0.91 million Btu per hour maximum heat input)

Emission Source ID No.	Emission Source Description
IS-V-2	Propane-fired vaporizer (0.91 million Btu per hour maximum heat input)
IS-MCB	Mold coating booth
IS-HEC	Hot End Coating Hood
IS-PCO	Proceco Typhoon spray washer
IS-VP1 through IS-VP4	Four glass mold vacuum pumps
IS-PCVS	Portable central vacuum system
IS-UT2	One portable 1,000 gallon used oil storage tank
IS-UT4	One used oil storage tank (1,000 gallon capacity)
IS-UT5	One oil sludge storage tank (1,000 gallon capacity)
IS-OWS	One oil/water separator (10,000 gallon capacity)
IS-PT5	One propane tank (1,000 gallon capacity)
IS-FP1 **NSPS IIII, GACT ZZZZ**	Diesel fuel-fired fire pump engine (183 BHP)
IS-CC	Carton coding

* IS EG-2 is only subject to 60.4208 under NSPS IIII.

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.

3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
03713T37	03713T36	MM DD, 2017	MM DD, YYYY

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Ardagh Glass Inc.**
Facility ID: **9800155**

Facility Site Location: **2201 Firestone Parkway**
City, County, State, Zip: **Wilson, Wilson County, North Carolina, 27893**

Mailing Address: **2201 Firestone Parkway**
City, State, Zip: **Wilson, North Carolina, 27893**

Application Number: **9800155.16A**
Complete Application Date: **October 17, 2016**

Primary SIC Code: **3221**
Division of Air Quality, Regional Office Address: **Raleigh Regional Office**
1628 Mail Service Center
Raleigh, North Carolina 27699-1628

Permit issued this the DD[nd] day of MM, 20YY

_____
William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table Of Contents

SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4	GF-1 **NSPS**	Glass melting furnace including the following equipment: (i) one natural gas/propane/No. 2 fuel oil/ No. 4 fuel oil and oxygen (oxy fuel) fired furnace (Furnace #28) with a 565 ton per day maximum glass pull rate (90 million Btu per hour maximum heat input capacity and 2,400 kVA maximum electric boost capacity) (ii) one natural gas/propane-fired distributor (3.26 million Btu per hour maximum heat input capacity) (iii) five natural gas/propane-fired forehearths (12.02 million Btu per hour combined maximum heat input capacity)	n/a	n/a
11	GF-2 **NSPS GACT 6S**	Glass melting furnace including the following equipment: (i) one natural gas/propane/No. 2 fuel oil/ No. 4 fuel oil and oxygen (oxy fuel) fired furnace (Furnace #29) with a 500 ton per day maximum glass pull rate (98 million Btu per hour maximum heat input capacity and 2,400 kVA maximum electric boost capacity) (ii) one natural gas/propane-fired distributor (9.1 million Btu per hour maximum heat input capacity) (iii) three natural gas/propane-fired forehearths (5.3 million Btu per hour combined maximum heat input capacity)	n/a	n/a
18	ES-07 through ES-09 **GACT ZZZZ**	Three No. 2 fuel oil-fired peak shaving generators (1600 KW each)	CD-PSG-07 through CD-PSG-09	Three oxidation catalysts
18	ES-10 and ES-11 **GACT ZZZZ**	Two No. 2 fuel oil-fired peak shaving generators (1520 and1600 KW respectively)	CD-PSG-10 and CD-PSG-11	Two oxidation catalysts
26	MS-1	Mold swabbing operation	n/a	n/a

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	RM-RH	raw material receiving hopper	NA	NA

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	RM-1	raw material storage	CD-1	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-2	raw material storage	CD-2	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-3	raw material storage	CD-3	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-4	raw material storage	CD-4	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-5	raw material storage	CD-5	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-6	raw material storage	CD-6	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-7	raw material storage	CD-7	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-8	raw material storage	CD-8	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-9	minor ingredient storage	CD-9	cartridge filter (2 cartridges and a total of 380 square feet of filter area)
	RM-10	raw material conveyor #1	CD-10	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-11	raw material conveyor #2	CD-11	bagfilter (9 bags and a total of 65 square feet of filter area)
	RM-13	railcar raw material unloading	CD-A	bagfilter (36 bags and a total of 382 square feet of filter area)
	RM-14	railcar raw material unloading	CD-B	bagfilter (36 bags and a total of 382 square feet of filter area)
	RM-15	weigh/mix elevator	CD-C	bagfilter (9 bags and a total of 65 square feet of filter area)

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. The following source:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
GF-1	Glass melting furnace including the following equipment:	n/a	n/a

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	(i) one natural gas/propane/No. 2 fuel oil/ No. 4 fuel oil and oxygen (oxy fuel) fired furnace (Furnace #28) with a 565 ton per day maximum glass pull rate (90 million Btu per hour maximum heat input capacity and 2,400 kVA maximum electric boost capacity) (ii) one natural gas/propane-fired distributor (3.26 million Btu per hour maximum heat input capacity) (iii) five natural gas/propane-fired forehearths (12.02 million Btu per hour combined maximum heat input capacity)		

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**Melter only** As determined per condition 2.1 A.1.a	15A NCAC 02D .0515
SO_2	2.3 pounds per million Btu	15A NCAC 02D .0516
Particulate matter (filterable only)	**Melter only** 1.0 pounds per ton of glass pulled as defined in Section 2.1 A.3	15A NCAC 02D .0524 (40 CFR 60, Subpart CC)
Visible emissions	20 percent opacity	15A NCAC 02D .0521
PM10, PM2.5	**Melter only** Recordkeeping and reporting of actual emissions (application nos. 9800155.09B, 9800155.10B and 9800155.11B)	15A NCAC 02D .0530(u)
PM10, PM2.5, SO2, NOx, Sulfuric acid mist, Lead, Fluorides	**Melter Only** Recordkeeping and reporting of actual emissions (application nos. 9800155.14B and 9800155.14E)	15A NCAC 02D .0530(u)
Odors	**State Enforceable Only** See Section 2.2 B.2	15A NCAC 02D .1806
Toxic air pollutants	See Section 2.2 B.3	15A NCAC 02D .1100
HAPs	See Section 2.2 A.1	15A NCAC 02D .1111
SO_2, NOx, PM, Sulfuric acid mist	**Melter only** **State Enforceable Only** See Section 2.3	NCGS 143-215.108(c) [Global Consent decree]
SO_2	**Melter only** See Section 2.2 A.2., 2.2 A.3 and 2.3	NCGS 143-215.108(c) [Global Consent decree]

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of PM from the glass melting furnace (ID No. GF-1) (melter only) shall not exceed an allowable emission rate as calculated by the following equation:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels, and stoichiometric combustion oxygen are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. The Permittee shall conduct annual stack tests in accordance with General Condition JJ. If the results of such test are above the limit given in Section 2.1 A.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring / Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain production records (in written or electronic form) of tons of glass pulled per calendar day basis. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall include:
    i. the date and approval status of the most recent source test conducted pursuant to Section 2.1 A.1.c above;
    ii. the production rate at which the source test was conducted; and
    iii. the maximum production rate achieved since the most recent source test conducted pursuant to Section 2.1 A.1.b above.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of SO2 from the glass melting furnace (ID No. GF-1) shall not exceed **2.3 pounds per million Btu heat input.** SO2 formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for SO2 emissions from the firing of natural gas/ propane/ No. 2 fuel oil/No. 4 fuel oil in this glass melting furnace.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60 SUBPART CC)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart CC, "Standards of Performance for Glass Manufacturing Plants," including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02D .0524, 40CFR 60.293(b)**]**

b. The filterable PM emissions from the glass melting furnace (melter only, ID No. GF-1) shall not exceed 1.0 pound per ton of glass produced.

Testing [15A NCAC 02Q .0508(f), 40 CFR 60.293(f)]

c. The Permittee shall conduct annual stack tests in accordance with General Condition JJ. If the results of such test are above the limit given in Section 2.1 A.3.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.13 and 60.293]

d. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity from the glass melting furnace (melter only, ID No. GF-1). The COMS shall be calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications", 40 CFR 60.13 and 15A NCAC 02D .0613.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if any three-hour block average opacity value, excluding periods of flue raking (not to exceed 144 hours per year), startup, shut down, malfunction from the glass melting furnace (melter only, ID No. GF-1) exceeds:

i. 37.7 percent opacity when firing natural gas/propane; or
ii. 19.8 percent opacity while firing No. 2/No. 4 fuel oil.

The three-hour block average opacity limit above was established by using the three 1-hour average opacity values from the compliance stack test and determining the 99% Upper Confidence Limit (UCL) of the three 1-hour averages. The resultant three-hour opacity UCL value was then pro-rated to the NSPS particulate limit (1.0 pounds of PM per ton of glass pulled), by using the average PM emission value determined during the compliance stack test.

A three-hour block average opacity value shall be calculated as the arithmetic average of any and all valid six-minute averages within the three-hour period. A three-hour period means a 180- minute period commencing at 12am, 3am, 6am, 9am, 12pm, 3pm, 6pm, and 9pm each day. Valid six-minute averages are calculated per 40 CFR 60.13.

The Permittee may at anytime, reestablish through permitting procedures consistent with 15A NCAC 02Q .0500, these three-hour block average opacity values.

e. For the purposes of 40 CFR 60.293(c)(5) and 60.7, Excess Emissions are defined as all of the 6-minute periods during which the average opacity of the emissions from the glass melting furnace (melter only, ID No. GF-1) exceed the 99% UCL values determined from a compliance stack test as provided in 40 CFR 60.293(e) as

presented below:
i. 17.5 percent opacity when firing natural gas/propane; or
ii. 12.7 percent opacity while firing No. 2/No. 4 fuel oil.

The Permittee may at any time, consistent with the provisions of 40 CFR 60.293(e), reestablish, through permitting procedures consistent with 15A NCAC 02Q .0500, these UCL values.

f. The Permittee shall calculate the Percent Excess Emissions and the Percent COMS Downtime using the equations listed below:

Percent Excess Emissions (%EE):

$$\%EE = \frac{Duration\ of\ Excess\ Emissions - Duration\ of\ Excess\ Emissions\ During\ StartUp/ShutDown/Malfunction/Flue-raking}{Furnace\ Operating\ Time - Duration\ of\ StartUp\ Shutdown/Malfunction/Flue-raking} * 100\%$$

Percent COMs Downtime (%CD):

$$\%CD = \frac{COMs\ Downtime}{Furnace\ Operating\ Time} * 100\%$$

Where:

Excess Emissions	=	*Defined in Section 2.1 A.3.e*
Duration of Excess Emissions	=	*Summation of the excess emissions in hours during the given calendar three-month period*
Duration of Excess Emissions During StartUp/ ShutDown/ Malfunction/Flue-raking	=	*Summation of the excess emissions in hours occurring during all periods of startup/shutdown/malfunction/flue-raking during the given calendar three-month period*
*Furnace Operating Time**	=	*Summation of the operation time of the source in hours during the given calendar three-month period*
Duration of StartUp/ ShutDown/ Malfunction/Flue-raking	=	*Summation of the operation time of the source in hours occurring during all periods of startup/shutdown/malfunction/flue-raking during the given calendar three-month period*
*COMs downtime***	=	*Summation of time in hours during which the COMs is not operational and concurrent with the Furnace Operating Time during the given calendar three-month period*

* If the furnace operates less than 500 hours during any calendar three-month period, the Permittee may perform the above calculations using all of the operating data for the current calendar three-month period and the most recent data for the proceeding calendar three-month period until 500 hours of data are obtained. [N.C.G.S. 143-215.110]

** Quality assurance (QA) activities will be included in this calculation unless exempt by regulation or defined in an agency approved Quality Assurance (QA) Manual. The amount of exempt QA time will be reported in the report per Section 2.1 A.3.l.

Acceptable Operation and Maintenance [15A NCAC 02D .0524, 40CFR 60.293(c)]

g. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the Percent Excess Emissions from the glass melting furnace (melter only, ID No. GF-1) exceeds **3 percent** or if the Percent COMS Downtime exceeds **3 percent** in any calendar three-month period (January through March, April through June, July through September October through December).

Recordkeeping [15A NCAC 02Q .0508(f)]

h. Pursuant to 40 CFR 60.7(b), the Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

i. Pursuant to 40 CFR 60.7(f), the Permittee shall maintain records of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks;

adjustments and maintenance performed on these systems or devices; recorded in a permanent form suitable for inspection. The records shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

j. The Permittee shall record and maintain records of:
   i. Furnace operating time;
   ii. Date, time and duration of the performance of flue raking operations; and
   iii. Three-hour block average opacity values.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the recordkeeping requirements in Sections 2.1 A.3.h through j are not met.

Reporting [15A NCAC 02Q .0508(f)]

k. On a quarterly basis, the Permittee shall:
   i. Submit a report containing Percent Excess Emissions, Percent COMs Downtime, and Furnace Operating Time, as defined in Section 2.1 A.3.f above and the date, time and duration of the performance of flue raking operations.
   ii. pursuant to 40 CFR 60.293(c)(5) and 40 CFR 60.7(c), submit an excess emissions and monitoring system performance summary report. The report shall contain the information required per 40 CFR 60.7(c) and (d).
   iii. submit a report of the three-hour block average opacity values, as defined in Section 2.1 A.3.d, that exceed:
      a. **37.7 percent opacity** when firing natural gas/propane; or
      b. **19.8 percent opacity** while firing No. 2/No. 4 fuel oil.

The quarterly reports, acceptable to the Regional Air Quality Supervisor, shall be postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the glass-melting furnace (from the melter, distributor, and forehearths, ID No. GF-1) shall not be more than **20 percent opacity** when averaged over a six-minute period.

b. For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance with the 20 percent opacity limit shall be determined as follows:[15A NCAC 02D .0521(g)]

i. No more than four six-minute periods shall exceed the opacity standard in any one day; and

ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in paragraphs b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(c).

All periods of excess emissions shall be included in the determinations in paragraphs b.i and b.ii above until such time that the excess emissions are exempted according to the procedures in 02D .0535.

Testing [15A NCAC 02Q .0508(f)

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity from the melter. The COMS shall be calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications" and 15A NCAC 02D .0613. No monitoring or recordkeeping requirements are required for the distributor and forehearths.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given in Sections 2.1 A.4.a and b above, or if the records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the COMS data in accordance with the reporting requirements given in Section 2.1 A.3.k (Subpart CC reporting requirements). All instances of excess emissions with respect to 15A NCAC 02D .0521 must be clearly identified.

5. 15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

a. The Permittee has used projected actual emissions to avoid applicability of Prevention of Significant Deterioration requirements for a project consisting of modifications affecting the actual production throughput of the furnace (ID No. GF-1) and other equipment. This project is fully described in application nos. **9800155.14B and 9800155.14E.**

In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, record keeping and reporting requirements in Sections 2.1 A.5.b through e below.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ.

Recordkeeping [15A NCAC 02D .0530(u)]

c. The Permittee shall maintain records of the actual emissions of $PM_{10}/PM_{2.5}$, SO2, NO_x, H_2SO_4, Fluorides and Lead from the GF-1 melter in tons per year on a calendar year basis for ten years following the resumption of regular operations upon commencement of the modifications described in application no. **9800155.14B. and 9800155.14E. (ending with the 2028 calendar year report).**

d. The reported actual emissions (post-construction emissions) of the GF-1 melter for each of the ten calendar years will be compared to the projected actual emissions (pre-construction projection) for the GF-1 melter as included below:

Pollutant	Projected Actual Emissions* (tons per year)
$PM_{10}/PM_{2.5}$	96.5
SO_2	150.9
NOx	136.0
H_2SO_4	5.2
Fluorides	0.57
Lead	0.13

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.

The Permittee shall make the information, documented and maintained in this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

Reporting [15A NCAC 02D .0530(u)]

e. The Permittee shall submit a report of the actual emissions of the pollutants identified in Section 2.1 A.5.c from the GF-1 melter to the Director within 60 days after the end of each calendar year during which the records in Section 2.1 A.5.c must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

B. The following source:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
GF-2	Glass melting furnace including the following equipment: (i) one natural gas/propane/No. 2 fuel oil/ No. 4 fuel oil and oxygen (oxy fuel) fired furnace (Furnace #29) with a 500 ton per day maximum glass pull rate (98 million Btu per hour maximum heat input capacity and 2,400 kVA maximum electric boost capacity) (ii) one natural gas/propane-fired distributor (9.1 million Btu per hour maximum heat input capacity) (iii) three natural gas/propane-fired forehearths (5.3 million Btu per hour combined maximum heat input capacity)	n/a	n/a

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	**Melter Only** As determined per Section 2.1 B.1.a	15A NCAC 02D .0515
SO_2	2.3 pounds per million Btu	15A NCAC 02D .0516
PM (filterable only)	**Melter Only** 1.0 pounds per ton of glass pulled as defined in Section 2.1. B.3	15A NCAC 02D .0524 (40 CFR 60, Subpart CC)
Visible emissions	20 percent opacity	15A NCAC 02D .0521
$PM_{2.5}$, SO_2	**Melter Only** Recordkeeping and reporting of actual emissions (application no. 9800155.13A)	15A NCAC 02D .0530(u)
Odors	**State Enforceable Only** See Section 2.2 B.2	15A NCAC 02D .1806
HAPs	See Section 2.2 A.1	15A NCAC 02D .1111
SO_2, NOx, PM, Sulfuric acid mist	**Melter only** **State Enforceable Only** See Section 2.3	NCGS 143-215.108(c) [Global Consent decree]
SO_2	**Melter only** See Section 2.2 A.2, 2.2 A.3 and 2.3	NCGS 143-215.108(c) [Global Consent decree]

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of PM from the glass melting furnace (ID No. GF-2) (melter only) shall not exceed an allowable emission rate as calculated by the following equation:
For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels, and stoichiometric combustion oxygen are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. The Permittee shall conduct annual stack tests in accordance with General Condition JJ. If the results of such

test are above the limit given in Section 2.1 B.1.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring / Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain production records (in written or electronic form) of tons of glass pulled per calendar day basis. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
   i. The report shall include:
      A. the date and approval status of the most recent source test conducted pursuant to Section 2.1 B.1.c above;
      B. the production rate at which the source test was conducted; and
      C. the maximum production rate achieved since the most recent source test conducted pursuant to Section 2.1 B.1.b above.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of SO2 from glass melting furnace (ID No. GF-2) shall not exceed **2.3 pounds per million Btu heat input**. SO2 formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for SO2 emissions from the firing of natural gas/propane/ No. 2 fuel oil/No. 4 fuel oil in the glass melting furnace.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60 SUBPART CC)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart CC, "Standards of Performance for Glass Manufacturing Plants," including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02D .0524, 40CFR 60.293(b)]

b. The filterable PM emissions from the glass melting furnace (melter only, ID No. GF-2) shall not exceed **1.0 pound per ton of glass produced.**

Testing [15A NCAC 02Q .0508(f), 40 CFR 60.293(f)]

c. The Permittee shall conduct annual stack tests in accordance with General Condition JJ. If the results of such test are above the limit given in Section 2.1 B.3.a, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f), 40 CFR 60.13 and 60.293]

d. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity from the glass melting furnace (melter only, ID No. GF-2). The COMS shall be calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications", 40 CFR 60.13 and 15A NCAC 02D .0613.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if any three-hour block average opacity value, excluding periods of flue raking (not to exceed 144 hours per year), startup, shut down, malfunction from the glass melting furnace (melter only, ID No. GF-2) exceeds:

i. **14.8 percent opacity** when firing natural gas/propane; or
ii. **25.5 percent opacity** while firing No. 2/No. 4 fuel oil.

The three-hour block average opacity limit above was established by using the three 1-hour average opacity values from the compliance stack test and determining the 99% Upper Confidence Limit (UCL) of the three 1-hour averages. The resultant three-hour opacity UCL value was then pro-rated to the NSPS particulate limit (1.0 pounds of PM per ton of glass pulled), by using the average PM emission value determined during the compliance stack test.

A three-hour block average opacity value shall be calculated as the arithmetic average of any and all valid six-minute averages within the three-hour period. A three-hour period means a 180- minute period commencing at 12am, 3am, 6am, 9am, 12pm, 3pm, 6pm, and 9pm each day. Valid six-minute averages are calculated per 40 CFR 60.13.

The Permittee may at anytime, reestablish through permitting procedures consistent with 15A NCAC 02Q .0500, these three-hour block average opacity values.

e. For the purposes of 40 CFR 60.293(c)(5) and 60.7, Excess Emissions are defined as all of the 6-minute periods during which the average opacity of the emissions from the glass melting furnace (melter only, ID No. GF-2) exceed the 99% UCL values determined from a compliance stack test as provided in 40 CFR 60.293(e) as presented below:

i. **8.5 percent opacity** when firing natural gas/propane; or
ii. **14.1 percent opacity** while firing No. 2/No. 4 fuel oil.

The Permittee may at any time, consistent with the provisions of 40 CFR 60.293(e), reestablish, through permitting procedures consistent with 15A NCAC 02Q .0500, these UCL values.

f. The Permittee shall calculate the Percent Excess Emissions and the Percent COMS Downtime using the equations listed below:

Percent Excess Emissions (%EE):

$$\%EE = \frac{Duration\ of\ Excess\ Emissions - Duration\ of\ Excess\ Emissions\ During\ StartUp/ShutDown/Malfunction/Flue-raking}{Furnace\ Operating\ Time - Duration\ of\ StartUp Shutdown/Malfunction/Flue-raking} * 100\%$$

Percent COMs Downtime (%CD):

$$\%CD = \frac{COMs\ Downtime}{Furnace\ Operating\ Time} * 100\%$$

Where:

Excess Emissions	=	*Defined in paragraph e.*
Duration of Excess Emissions	=	*Summation of the excess emissions in hours during the given calendar three-month period*
Duration of Excess Emissions During StartUp/ ShutDown/ Malfunction/Flue-raking	=	*Summation of the excess emissions in hours occurring during all periods of startup/shutdown/malfunction/flue-raking during the given calendar three-month period*
*Furnace Operating Time**	=	*Summation of the operation time of the source in hours during the given calendar three-month period*
Duration of StartUp/ ShutDown/ Malfunction/Flue-raking	=	*Summation of the operation time of the source in hours occurring during all periods of startup/shutdown/malfunction/flue-raking during the given calendar three-month period*
*COMs downtime***	=	*Summation of time in hours during which the COMs is not operational and concurrent with the Furnace Operating Time during the given calendar three-month period*

* If the furnace operates less than 500 hours during any calendar three-month period, the Permittee may perform the above calculations using all of the operating data for the current calendar three-month period and the most recent data for the proceeding calendar three-month period until 500 hours of data are obtained. [N.C.G.S. 143-215.110]

** Quality assurance (QA) activities will be included in this calculation unless exempt by regulation or defined in an agency approved Quality Assurance (QA) Manual. The amount of exempt QA time will be reported in the report per Section 2.1 B.3.l.

Acceptable Operation and Maintenance [15A NCAC 02D .0524, 40CFR 60.293(c)]

g. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the Percent Excess Emissions from the glass melting furnace (melter only, ID No. GF-2) exceeds **3 percent** or if the Percent COMS Downtime exceeds **3 percent** in any calendar three-month period (January through March, April through June, July through September October through December).

Recordkeeping [15A NCAC 02Q .0508(f)]

h. Pursuant to 40 CFR 60.7(b), the Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

i. Pursuant to 40 CFR 60.7(f), the Permittee shall maintain records of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; recorded in a permanent form suitable for inspection. The records shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

j. The Permittee shall record and maintain records of:
   i. Furnace operating time;
   ii. Date, time and duration of the performance of flue raking operations; and
   iii. Three-hour block average opacity values.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the recordkeeping requirements in Section 2.1 B.3.h. through j. are not met.

Reporting [15A NCAC 02Q .0508(f)]

k. On a quarterly basis, the Permittee shall:
   i. Submit a report containing Percent Excess Emissions, Percent COMs Downtime, and Furnace Operating Time, as defined in Section 2.1 B.3.f above and the date, time and duration of the performance of flue raking operations.
   ii. Pursuant to 40 CFR 60.293(c)(5) and 40 CFR 60.7(c), submit an excess emissions and monitoring system performance summary report. The report shall contain the information required per 40 CFR 60.7(c) and (d).
   iii. Submit a report of the three-hour block average opacity values, as defined in Section 2.1 B.3.d, that exceed:
      a. **14.8 percent opacity** when firing natural gas/propane; or
      b. **25.5 percent opacity** while firing No. 2/No. 4 fuel oil.

The quarterly reports, acceptable to the Regional Air Quality Supervisor, shall be postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the glass-melting furnace (from the melter, distributor, and forehearths, ID No. GF-2) shall not be more than **20 percent opacity** when averaged over a six-minute period.

b. For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance with the 20 percent opacity limit shall be determined as follows:[15A NCAC 02D .0521(g)]
   i. No more than four six-minute periods shall exceed the opacity standard in any one day; and
   ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

Excess emissions during startup and shutdown shall be excluded from the determinations in paragraphs b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in paragraphs b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(c).

<u>All periods of excess emissions shall be included in the determinations in paragraphs b.i and b.ii above until such time that the excess emissions are exempted according to the procedures in 02D .0535</u>.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity from the melter. The COMS shall be calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications" and 15A NCAC 02D .0613. No monitoring or recordkeeping requirements are required for the distributor and forehearths.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given in Section 2.1 B.1.a and b above, or if the records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the COMS data in accordance with the reporting requirements given in Section 2.1 B.3.k (Subpart CC reporting requirements). All instances of excess emissions with respect to 15A NCAC 02D .0521 must be clearly identified.

5. 15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

a. The Permittee has used projected actual emissions to avoid applicability of Prevention of Significant Deterioration requirements for a project consisting of modifications affecting the production throughput of the furnace (ID No. GF-2). This project is fully described in application no. **9800155.13A.**

In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, record keeping and reporting requirements in Section 2.1 B.5.b through f below.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ.

Recordkeeping [15A NCAC 02D .0530(u)]

c. The Permittee shall maintain records of the actual emissions of $PM_{2.5}$ and SO_2 from the GF-2 melter in tons per year on a calendar year basis for five years following the resumption of regular operations upon commencement of the modifications described in application no. **9800155.13A.**

d. The reported actual emissions (post-construction emissions) of the GF-2 melter for each of the five calendar years will be compared to the projected actual emissions (pre-construction projection) for the GF-2 melter as included below:

Pollutant	Projected Actual Emissions* (tons per year)
$PM_{2.5}$	57.0
SO_2	151.8

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.

The Permittee shall make the information, documented and maintained in this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

Reporting [15A NCAC 02D .0530(u)]

e. The Permittee shall submit a report of the actual emissions of $PM_{2.5}$ and SO_2 from the GF-2 melter to the Director within 60 days after the end of each calendar year during which the records in Section 2.1 B.5.d must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

C. The following sources:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-07 through ES-09	Three No. 2 fuel oil-fired peak shaving generators (1,600 KW each)	CD-PSG-07 through CD-PSG-09	Three oxidation catalysts
ES-10 and ES-11	Two No. 2 fuel oil-fired peak shaving generators (1,520 and 1,600 KW respectively)	CD-PSG-10 and CD-PSG-11	Two oxidation catalysts

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
SO2	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	see Section 2.1 C.3	15A NCAC 02D .1111 [40 CFR Part 63, Subpart ZZZZ]

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of SO2 from the sources shall not exceed **2.3 pounds per million Btu heat input**. SO2 formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for SO2 emissions from the firing of No. 2 fuel oil in these sources.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for visible emissions from the firing of No. 2 fuel oil in these sources.

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590]

a. For these emission sources, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." and Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

c. The Permittee shall comply with the applicable requirements no later than May 3, 2013.

General Provisions [40 CFR 63.6665]

d. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ.

Notifications [40 CFR 63.6645]

e. i. The Permittee shall submit all of the notifications in the following regulations that apply by the dates specified:
   (A) 40 CFR 63.7(b) [*performance testing*] and (c) [*quality assurance program*];
   (B) 40 CFR 63.8(e) [*performance evaluation of CPMS*], (f)(4) and (f)(6) [*alternative monitoring methods*]; and
   (C) 40 CFR 63.9(b) through (e), and (g) and (h) [*initial notifications*].
   ii. The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
   iii. The Permittee shall submit the performance test results before the close of business on the 60th day following the completion of the performance test. [40 CFR 63.10(d)(2)]
   iv. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the notification requirements in Section 2.1 C.3.e are not met.

General Compliance Requirements [15A NCAC 02Q .0508(f)]

f. The Permittee shall:
   i. be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [40 CFR 63.6605(a)]
   ii. operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
   iii. be deemed in noncompliance with 15A NCAC 02D .1111 if these general compliance requirements are not met.

Fuel Requirements [15A NCAC 02Q .0508(f)]

g. The Permittee shall use diesel fuel in the engine with:
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
   [40 CFR 63.6604(a) and 40 CFR 80.510(b)]

Emissions and Operating Limitations [15A NCAC 02Q .0508(f)]

h. The Permittee shall, using an oxidation catalyst:
   i. limit the concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or
   ii. reduce CO emissions by 70 percent or more.
   [40 CFR 63.6603(a), Table 2d, Table 2b]

i. Except during periods of start-up, the Permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 CFR 63.6603(a), Table 2b]

j. Except during periods of start-up, the Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the performance test. [40 CFR 63.6603(a), Table 2b]

k. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h), Table 2d]

l. If the engine(s) is not equipped with a closed crankcase ventilation system, the Permittee shall comply with either subparagraph i or ii. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
   i. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
   ii. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
   [40 CFR 63.6625(g)]

m. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Section 2.1 C.3.g **through l** are not met.

Testing Requirements [15A NCAC 02Q .0508(b)]

n. The Permittee shall conduct initial and subsequent performance tests to demonstrate compliance with the limitations in Section 2.1 A.1.h and i; and record the catalyst pressure drop. [40 CFR63.6612(a), 63.6630(a)(b), Table 5]

o. The Permittee met the initial testing requirements in December 2012.

p. The Permittee shall conduct subsequent performance tests;
   i. for **not limited use** stationary RICE, every 8,760 hours *of operation* or 3 years, whichever comes first.
   ii. for **limited use** stationary RICE, every 8,760 hours *of operation* or 5 years, whichever comes first.
   [40 CFR63.6615, Table 3]

q. Each performance test shall be conducted according to the requirements of 40 CFR 63 Subpart ZZZZ Table 4. If a non-operational stationary RICE is subject to performance testing, the Permittee does not need to start up the engine solely to conduct the performance test. The Permittee can conduct the performance test when the engine is started up again. [40 CFR63.6620(b)]

r. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Section 2.1 C.3.n through q are not met.

Monitoring [15A NCAC 02Q .0508(f)]

s. The Permittee shall install, operate, and maintain continuous parameter monitoring systems (CPMS) to monitor the catalyst inlet temperature for each catalyst and reduce the temperature data to 4- hour rolling averages. The Permittee shall maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature in Section 2.1 C.3.i. [40 CFR 63 Table 5, 63.6640(a), Table 6]

t. The Permittee shall measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test per Section 2.1 C.3.j. [40 CFR 63 Table 5, 63.6640(a), Table 6]

u. The Permittee shall install, operate, and maintain each CPMS according to the requirements in paragraphs (1) through (6):
   (1) The Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of 40 CFR 63.6625 and in 40 CFR 63.8(d).
   (2) The Permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).
(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
(5) The Permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
(6) The Permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [40 CFR 63.6625(b)]

v. The Permittee shall monitor and collect data as follows:
   i. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
   ii. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Permittee shall, however, use all the valid data collected during all other periods.

   [40 CFR 63.6635]

w. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Sections 2.1 C.3.s through v are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

x. The Permittee shall keep records of the following monitoring data:
   i. catalyst(s) inlet temperature data including the 4-hour rolling averages; and
   ii. the monthly measurements of the pressure drop across the catalyst(s).

   [40 CFR 63.6655(d)]

y. The Permittee shall keep the following:
   i. A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
   ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
   iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
   iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.
   v. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 C.3.f.ii including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

   [40 CFR 63.6655]

z. For each inlet catalyst temperature CPMS, the Permittee shall keep the following records:
   i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
   ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
   iii. Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

   [40 CFR 63.6655(b)]

aa. The Permittee shall keep each record in a form suitable and readily accessible for expeditious review in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660]

bb. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Section 2.1 C.3.x through aa are not met.

Reporting [15A NCAC 02Q .0508(f)]

cc. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified. [40 CFR 63.6650(b)(5) and 63.6650(f)]

dd. The compliance report must contain:
   i. Company name and address;
   ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the

content of the report; and

iii. Date of report and beginning and ending dates of the reporting period.

iv. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Section 2.1 C.3.f.ii, including actions taken to correct a malfunction.

v. If there are no instances of noncompliance from any emission or operating limitations that apply, a statement that there were no instances of noncompliance from the emission or operating limitations during the reporting period.

vi. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

[40 CFR 63.6650(c)]

ee. For each instance of noncompliance from an emission or operating limitation that occurs for the stationary RICE where the Permittee is **not using a CMS** to comply with the emission or operating limitations, the compliance report must contain the information in Section 2.1 C.3.dd.i through iv and the following information:

i. The total operating time of the stationary RICE at which the instance of noncompliance occurred during the reporting period.

ii. Information on the number, duration, and cause of instances of noncompliance (including unknown cause, if applicable), as applicable, and the corrective action taken.

[40 CFR 63.6650(d)]

ff. For each instance of noncompliance from an emission or operating limitation occurring for a stationary RICE where the Permittee **is using a CMS** to comply with the emission and operating limitations in this subpart, the Permittee shall include information in Section 2.1 C.3.dd.i through iv and the following information:

i. The date and time that each malfunction started and stopped.

ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).

iv. The date and time that each instance of noncompliance started and stopped, and whether each instance of noncompliance occurred during a period of malfunction or during another period.

v. A summary of the total duration of the instances of noncompliance during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

vi. A breakdown of the total duration of the instances of noncompliance during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

viii. An identification of each parameter and pollutant that was monitored at the stationary RICE.

ix. A brief description of the stationary RICE.

x. A brief description of the CMS.

xi. The date of the latest CMS certification or audit.

xii. A description of any changes in CMS, processes, or controls since the last reporting period.

[40 CFR 63.6650(e)]

gg. The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if Section 2.1 C.3.cc through ff are not met.

D. The following sources:

Table 2.1 D

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
RM-RH	raw material receiving hopper	NA	NA
RM-1	raw material storage	CD-1	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-2	raw material storage	CD-2	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-3	raw material storage	CD-3	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-4	raw material storage	CD-4	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-5	raw material storage	CD-5	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-6	raw material storage	CD-6	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-7	raw material storage	CD-7	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-8	raw material storage	CD-8	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-9	minor ingredient storage	CD-9	cartridge filter (2 cartridges and a total of 380 square feet of filter area)
RM-10	raw material conveyor #1	CD-10	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-11	raw material conveyor #2	CD-11	bagfilter (9 bags and a total of 65 square feet of filter area)
RM-13	railcar raw material unloading	CD-A	bagfilter (36 bags and a total of 382 square feet of filter area)
RM-14	railcar raw material unloading	CD-B	bagfilter (36 bags and a total of 382 square feet of filter area)
RM-15	weigh/mix elevator	CD-C	bagfilter (9 bags and a total of 65 square feet of filter area)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	As determined per Section 2.1 D.1.a	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of PM from the sources shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. PM emissions from these sources shall be controlled as described in Table 2.1 D. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and bagfilters for leaks; and
   ii. an annual internal inspection of the bagfilters' structural integrity.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
f. Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and by July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. i. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month/ of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   (A) take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   (B) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a above.
   ii. The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if:
   (A) the above-normal emissions are not corrected per c.i.(A) above;
   (B) the demonstration in c.i.(B) above cannot be made; or
   (C) the monthly observations are not conducted per c.i above.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made

available to an authorized representative upon request. The logbook shall record the following:

i. the date and time of each recorded action;
ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 D.2.c and d, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and by July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. The following source:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
MS-1	Mold swabbing operation	n/a	n/a

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	As determined per Section 2.1 E.1.a	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of PM from this source shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for PM emissions from this source.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required for visible emissions from this source.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Glass Melting Furnaces # 28 and #29 (ID Nos. GF-1 and GF-2)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.11448]

a. For each of these sources, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, SUBPART SSSSSS - "National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources."

Definitions and Nomenclature [40 CFR 63.11459]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11459 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.11458]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions as specified in Table 2 to 40 CFR Part 63, Subpart SSSSSS.

Compliance Date [40 CFR 63.11450(d)]

d. For each furnace, the Permittee shall comply with one of the two applicable emission limits within 2 years of the date on which production of the glass product that contains glass manufacturing metal HAP was introduced.
[40 CFR 63.11450(d)]

Notification Requirements [15A NCAC 02Q .0508(f)]

e. For each furnace, the Permittee shall submit an Initial Notification in accordance with 40 CFR 63.9(b) and 40 CFR 63.11456 within 120 days after each furnace becomes subject to the standard.

f. If required to conduct a performance test, the Permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test, according to 40 CFR 60.8 or 40 CFR 63.10(d)(2).

g. If the conditions specified in 40 CFR 63.11452(a)(2) are satisfied and a performance test is not required, the Permittee shall submit a Notification of Compliance Status, including the results of the previous performance test, before the close of business on the compliance date specified in Section 2.2 A.1.d.

[40 CFR 63.11456]

If the requirements in Section 2.2 A.1.e through g are not met, the Permittee shall be deemed in noncompliance with the notification requirements of 15A NCAC 02D .1111.

Emission Limitations [15A NCAC 02Q .0508(f)]

h. For each furnace that produces glass at an annual rate of at least 45 Mg/yr (50 tpy) and is charged with glass manufacturing metal HAP as raw materials, the Permittee shall meet one of the following emission limits:
   i. The 3-hour block average production-based PM mass emission rate must not exceed 0.1 gram per kilogram (g/kg) (0.2 pound per ton (lb/ton)) of glass produced; OR
   ii. The 3-hour block average production-based metal HAP mass emission rate must not exceed 0.01 g/kg (0.02 lb/ton) of glass produced.

[40 CFR 63.11451, Table 1]

Testing [15A NCAC 02Q .0508(f)]

i. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable emission limits given in Section 2.2 A.1.h above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

j. For each furnace, the Permittee shall conduct a performance test according to the requirements of 40 CFR 63.11452(b) within 180 days after its respective compliance date and report the results in the Notification of

Compliance Status, except as specified in 40 CFR 63.11452 (a)(2).
[40 CFR 63.11452(a)(1), (b)]

If the requirements in Section 2.2 A.1.j is not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring and Continuous Compliance Requirements [15A NCAC 02Q .0508(f)]

k. The Permittee shall be in compliance with the applicable emission limits in this subpart at all times, except during periods of startup, shutdown, and malfunction. [40 CFR 63.11455(a)]
l. The Permittee shall always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). [40 CFR 63.11455(b)]
m. For each affected furnace that is subject to the emission limit specified in Section 2.2 A.1.h, the Permittee shall demonstrate continuous compliance by satisfying the applicable recordkeeping requirements specified below. [40 CFR 63.11455(e)]

Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

n. The Permittee shall keep the following records:
    i. A copy of any Initial Notification and Notification of Compliance Status submitted and all documentation supporting those notifications, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
    ii. The records specified in 40 CFR 63.10(b)(2) and (c)(1) through (13).
    iii. For each affected source, records of production rate on a process throughput basis (either feed rate to the process unit or discharge rate from the process unit). The production data must include the amount (weight or weight percent) of each ingredient in the batch formulation, including all glass manufacturing metal HAP compounds.

    [40 CFR 63.11457(a)]
o. The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.11457(b)]
p. As specified in 40 CFR 63.10(b)(1), the Permittee shall keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee shall keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The records may be kept offsite for the remaining three years. [40 CFR 63.11457(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 A.1.k through p are not met.

Reporting Requirements [15A NCAC 02Q .0508(f)]

q. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance shall be clearly identified.

State-Enforceable Only

2. NCGS 143-215.108

a. Pursuant to NCGS 143-215.108(c), and as required by the Consent Decree in the matter of *United States v. Saint-Gobain Containers, Inc.* (Civil Action No. 2:10-cv-00121-TSZ) relating to alleged violations of the Clean Air Act, the combined emissions from the glass melting furnaces (ID Nos. GF-1 and GF-2, melters only) shall not exceed 400 tons of SO_2 per calendar year combined, as measured by SO_2 CEMS. [Section 2.3.I. 8.g.v]

b. *[AGI]* shall continuously comply with this limitation throughout the duration of the Consent Decree except during periods of Abnormally Low Production Rate Days, Furnace Startup, Malfunction of the Furnace, Maintenance of the Furnace, and Color Transition. These terms are defined in Condition 2.3.I.

Monitoring/Recordkeeping

c. *[AGI]* shall install, calibrate, certify, maintain, and operate the SO_2 CEMS per Section 2.3.I.15.c.

d. *[AGI]* shall comply with all the requirements and determine the emission rate in terms of tons per calendar year per condition 2.3.I.15.d.

e. *[AGI]* shall comply with CEMS Certification Event requirements per Section 2.3.I.15.h.

Reporting

f. The Permittee shall, on a quarterly basis, consistent with 40 CFR 60.7(c), submit an excess emissions and monitoring system performance summary report. The report shall contain the information required per 40 CFR 60.7(c) and (d). The format for the report will be provided by the DAQ.

g. The quarterly reports, acceptable to the Regional Air Quality Supervisor, shall be postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

STATE AND FEDERAL-ENFORCEABLE

3. NCGS 143-215.108

a. Pursuant to NCGS 143-215.108(c), and as required by the Consent Decree in the matter of *United States v. Saint-Gobain Containers, Inc.* (Civil Action No. 2:10-cv-00121-TSZ) relating to alleged violations of the Clean Air Act, the SO_2 emissions from the glass melting furnaces (ID Nos. GF-1 and GF-2, melters only) shall not exceed the limits in Table 2.2 A.3.a below:

Table 2.2 A.3.a

Furnace	Emission Limits (lbs SO_2/ton of glass produced, 30-day rolling average)			
	Flint (clear) glass		Colored (all other) Glass	
	Combusting natural gas	Combusting fuel oil	Combusting natural gas	Combusting fuel oil
Furnace # 28 (ID No. GF-1)	1.6	3.6	2.4	4.4
Furnace # 29 (ID No. GF-2)	1.6	3.6	2.4	4.4

The limits in Table 2.2 A.3.a shall apply during all Operating Days except during Furnace Startup, Maintenance of the Furnace, Malfunction of the Furnace, Color Transition, and Abnormally Low Production Rate Days. For these exception periods, the Permittee shall meet the following SO_2 emission limits:

1. SO_2 Limit during Abnormally Low Production Rate Days – For any Abnormally Low Production Rate Day, the Permittee may elect to exclude the emissions generated during that Day from the Emission Rate 30-day Rolling Average. During these Days, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limits:

Table 2.2 A.3.a.1

Furnace	Abnormally Low Production Rate Threshold, (tons of glass produced per day)	Emission Limits During Abnormally Low Production Rate Days (lbs SO_2/day of glass produced, 24-hour block average)			
		Flint (clear) Glass		Colored (all other) Glass	
		Combusting natural gas	Combusting fuel oil	Combusting natural gas	Combusting fuel oil
Furnace # 28 (ID No. GF-1)	198	904	2,034	1,356	2,486
Furnace # 29 (ID No. GF-2)	175	800	1,800	1,200	2,200

2. SO_2 limit during Furnace Startup – the Permittee shall comply with the following operational limit to limit SO_2 emissions during all phases of Furnace Startup:
   a. During the startup period, the Permittee will limit the amount of sulfur added to the batch materials to 2.6 pounds per ton of total batch material (including cullet) or less.

3. SO_2 limit during Malfunction of the Furnace – For any Operating Day where a Malfunction of the Furnace occurs for any period of time, the Permittee may elect to exclude the emissions generated during that Operating Day (or Operating Days if the event covers more than one Operating Day) from the Emission Rate 30-day Rolling Average. During the Malfunction Days excluded from the Emission Rate 30-day Rolling Average, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limits:

Table 2.2 A.3.a.3

Furnace	Emission Limits During Malfunction Days (lbs SO_2/day of glass produced, 24-hour block average)	
	All Glass	
	Combusting natural gas	Combusting fuel oil
Furnace # 28 (ID No. GF-1)	4,238	7,628
Furnace # 29 (ID No. GF-2)	3,750	6,750

4 SO_2 limits during Maintenance – For any Operating Day where Maintenance activities on the Furnace are performed, the Permittee may elect to exclude the Maintenance Day from the Emission Rate 30-day Rolling Average. For any Day which is excluded from the 30-day rolling average, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limits:

Table 2.2 A.3.a.4

Furnace	Emission Limits During Maintenance Days (lbs SO_2/day of glass produced, 24-hour block average)			
	Flint (clear) Glass		Colored (all other) Glass	
	Combusting natural gas	Combusting fuel oil	Combusting natural gas	Combusting fuel oil
Furnace # 28 (ID No. GF-1)	$MH * 177 + NH * 38$	$MH * 318 + NH * 85$	$MH * 318 + NH * 57$	$MH * 177 + NH * 104$
Furnace # 29 (ID No. GF-2)	$MH * 156 + NH * 33$	$MH * 281 + NH * 75$	$MH * 281 + NH * 50$	$MH * 156 + NH * 92$

Where:

MH = Hours of Maintenance

NH = Normal Hours = 24 – MH

5. SO_2 limit during Color Transition – For any Operating Days during which a Color Transition is occurring the Permittee may elect to exclude the emissions on such Days from the Emission Rate 30-day Rolling Average. During these Days, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit:

Table 2.2 A.3.a.5

Furnace	Emission Limits During Color Transition Days (lbs SO_2/day of glass produced, 24-hour block average)	
	Combusting natural gas	Combusting fuel oil
Furnace # 28 (ID No. GF-1)	2,825	5,085
Furnace # 29 (ID No. GF-2)	2,500	4,500

b. Terms used in Section 2.2 A.3 that are defined in the Act or in federal regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in the Consent Decree (Civil Action No. 2:10-cv-00121-TSZ) [Section 2.3 of this permit].
c. Compliance with the 30-day rolling average limits set forth in Section 2.2 A.3.a may be determined by averaging the emissions from both Furnaces subject to the same emission limit.
d. No Furnace may combust fuel oil which has a sulfur content in excess of 0.5 percent, by weight.

Monitoring/Recordkeeping

e. The Permittee shall install, calibrate, certify, maintain, and operate the SO_2 CEMS pursuant to Section 2.3 I.15.c.
f. The Permittee shall comply with all the requirements and determine SO_2 emissions pursuant to Section 2.3 I.15.d.
g. The Permittee shall comply with the CEMS Certification Event requirements pursuant to Section 2.3 I.8.h.
h. The Permittee shall comply with the recordkeeping requirements found in Section 2.3 I.8.j and k.

Reporting

i. The Permittee shall comply with the reporting requirements found in Sections 2.3 I.35 through 40 and Section 2.3 II.

B. Facility Wide Affected Sources

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	**State-Enforceable Only** Odorous emissions must be controlled	15A NCAC 02D .1806
Toxic air pollutants	**State-Enforceable Only** Emission Limitations	15A NCAC 02D .1100

State-Enforceable Only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State-Enforceable Only

2. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the air toxics compliance demonstration approved on December 11, 2014, the following emission limits in table 2.2 B.2 shall not be exceeded.

Monitoring/Recordkeeping/Reporting

b. The toxic air pollutant emission limits are calculated as described in the Air Permit Review document for Permit No. 03713T34. The modeled impacts (which include the contribution of the GF-2 melter) were memorialized in a DAQ memo dated December 15, 2014. If the Permittee determines through subsequent source testing that any of the emission factors are greater than those included in this analysis, the Permittee shall submit a written notification with the new emission factor. The DAQ will then reevaluate compliance with the respective AALs under 15A NCAC 02D .1100. The emission limits may be revised administratively pending DAQ review. No other monitoring, recordkeeping and reporting requirements apply.

c. The Permittee shall submit a permit application to comply with 15A NCAC 02D .1100 prior to operating Furnace 28 (ID No. GF-1) at a rate exceeding 550 tpd.

Table 2.2 B.2

Permit ID No.	Model ID	Source Description	Ammonia	Arsenic	Benzene	Beryllium	Cadmium	Chromium VI	Soluble Chromate Compounds	Formaldehyde	Fluorides	HCl	Mercury	Nickel	Sulfuric Acid
			Hourly	Annual	Annual	Annual	Annual	Annual	Daily	Hourly	Hourly/ Daily	Hourly	Daily	Daily	Hourly/ Daily
			lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
GF-1	GF1	GF-1-Melter	5.333E-01	4.80E-03	1.83E-03	6.47E-04	3.40E-03		5.21E-04	3.20E-02	1.51E-01		2.80E-04	5.22E-02	1.19E+00
GF-1 [a]	FD1	Forehearths and Distributor for Furnace #1			3.10E-05					1.11E-03					
Annealing Lehrs (IS-AL-1 through 6)[a]	AL1-6	Annealing Lehrs 1 through 6			**4.12E-05**					1.47E-03					
Mold Preheat Ovens #1 through 6[b]	OV-OV6	Mold Preheat Ovens #1 through 6			3.23E-06					1.15E-04					
IS-SH [a]	SH	Space Heaters		6.96E-06	9.74E-07	5.22E-06	5.22E-06			3.48E-05			5.22E-06	5.22E-06	
IS-HET [a]	HET	Hot End Treatment										7.40E-01			

[a] Included in the lehr roof monitor pseudo point sources.
[b] Included in the furnace roof monitor pseudo point sources.

SECTION 2.3 – Global Consent Decree

State Enforceable Only

I. Pursuant to NCGS 143-215.108(c):

a. The conditions below are excerpted from the Consent Decree in the matter of *United States v. Saint-Gobain Containers, Inc.* (Civil Action No. 2:10-cv-00121-TSZ) relating to alleged violations of the Clean Air Act. The Date of Entry of this Consent Decree is May 7, 2010.

b. Terms used in the conditions below that are defined in the Act or in federal regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in the Consent Decree (Civil Action No. 2:10-cv-00121-TSZ).

c. All conditions contained in SECTION IV. INJUNCTIVE RELIEF, SECTION IX. REPORTING REQUIREMENTS, and SECTION XVII. NOTICES of the Consent Decree that apply to the furnaces at the Wilson facility are presented below with minimal changes to the original text. The numbering of the Consent Decree conditions has been included below intact.

d. Specific Consent Decree language that is not applicable to either furnace at the Wilson facility has been removed and is indicated by ellipses while minor changes or additions to other Consent Decree language is indicated by bracketed and italicized language.

IV. INJUNCTIVE RELIEF

7. NOX Emission Controls, Limits, and Compliance Schedule

* * *

b. NO_X Emission Controls and Compliance Schedule *[The requirements of Paragraph 7.b. have been satisfied]*

c. For Furnaces with Oxyfuel Technology: *[The requirements of Paragraph 7.c. have been satisfied]*

i. *The requirements of Paragraph 7.c.i. have been satisfied* .

ii. *[AGI]* shall install, maintain and operate the … Furnace *[# 28 and#29*] such that the gas that provides the oxidant for combustion of the fuel is at least 90 percent oxygen.

iii. *[AGI]* shall comply with the following applicable limits for Oxyfuel Furnaces:

1. Emission Rate 30-day Rolling Average Limit – Commencing on the first Operating Day after completion of the Furnace Startup period and CEMS Certification (where the CEMS has been installed), but no later than the date specified in Table 2, an Oxyfuel Furnace shall not exceed the Emission Rate 30-day Rolling Average of 1.3 pounds of NO_X per ton of glass produced, as measured using a NO_X CEMS , except during the following periods (as set forth in this Subparagraph): Abnormally Low Production Rate Days; Furnace Startup; Malfunction of the Furnace; and Maintenance of the Furnace.

2. NO_X Limit during Abnormally Low Production Rate Days –For any Abnormally Low Production Rate Day *[AGI]* may elect to exclude the emissions generated during that Day from the Emission Rate 30-day Rolling Average. During these Days, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit:

$$NO_{X\,OxyAbn} = 1.3\frac{\text{lb NOx}}{\text{ton}} \times \frac{P}{0.35}\text{tpd}$$

$$NO_{x\,Oxy\,Abn(Furnace\,28)} = 1.3\,\frac{lb\ NOx}{ton} X\,\frac{198}{0.35}\,tpd = 735\,\frac{lb\ NOx}{day}$$

$$NO_{X\,OxyAbn(Furnace\,29)} = 1.3\frac{\text{lbNOx}}{\text{ton}} \times \frac{175}{0.35}\text{tpd} = 650\frac{\text{lb NOx}}{\text{day}}$$

Where:

NO_X Oxy Abn = NO_X emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.

P = Furnace-specific production threshold as defined in Paragraph 10, in tons of glass produced per day.

3. Limits during Furnace Startup –

   a. Initial Heating Phase Operational Limit: *[AGI]* shall burn no more than 5.0 million standard cubic feet of natural gas in that Furnace during the Initial Heating Phase of the Furnace Startup.

   b. Refractory Soak and Seal Phase Operational Limits: *[AGI]* shall comply with the following operational limits to limit NO_X emissions during the Refractory Soak and Seal Phase of the Furnace Startup:

      i. Burn no more than sixty million standard cubic feet natural gas in that Furnace;

      ii. Limit excess oxygen below 5 percent at the Furnace exhaust flue, as determined by handheld monitor, once per shift;

      iii. Limit Hot Spot Temperature to 2900 degrees F; and

      iv. Use thermal blankets or similar techniques to minimize air infiltration until expansion joints are sufficiently closed.

   c. Furnace Stabilization Phase Operational Limits: *[AGI]* shall comply with the following operational limits to limit NO_X emissions during the Furnace Stabilization Phase of the Furnace Startup:

      i. Burn no more than ninety million standard cubic feet natural gas in that Furnace;

      ii. Limit excess oxygen below 5 percent at the Furnace exhaust flue as determined by handheld monitor, once per shift; and

      iii. Limit Hot Spot Temperature to 2900 degrees F.

4. NO_X limit during Malfunction of the Furnace – For any Operating Day where a Malfunction of the Furnace occurs for any period of time, *[AGI]* may elect to exclude the emissions generated during that Operating Day (Operating Days if the event covers more than one Operating Day) from the Emission Rate 30-day Rolling Average. During the Malfunction Days excluded from the Emission Rate 30-day Rolling Average, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit:

$$NO_{X\,OxyMalf} = 4 \times NO_{X\,OxyAbn}$$

$$NO_{x\ Oxy\ Malf\ (Furnace\ 28)} = 4\ X\ 735\ \frac{lb\ NOx}{day} = \ 2{,}940\ \frac{lb\ NOx}{day}$$

$$NO_{X\,OxyMalf(Furnace\,29)} = 4 \times 650 \frac{\text{lb NOx}}{\text{day}} = 2{,}600 \frac{\text{lb NOx}}{\text{day}}$$

Where:

$NO_{X\ Oxy\ Malf}$ = NO_X emission limit for an Oxyfuel Furnace during a Malfunction Day, in pounds per day.

$NO_{X\ Oxy\ Abn}$ = As defined in Paragraph 7.c.iii.2, NO_X emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.

5. NO_X limit during Maintenance of the Furnace – For any Operating Day where Maintenance activities on the Furnace are performed, *[AGI]* may elect to exclude the Maintenance Day from the Emission Rate 30-day Rolling Average. For any Maintenance Day which is excluded from the 30-day rolling average, a CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit:

$$NO_{X\,OxyMaint} = \frac{MH \times \left[4 \times NO_{X\,OxyAbn}\right]}{24} + \frac{NH \times \left[NO_{X\_OxyAbn}\right]}{24}$$

$$NO_{x\ Oxy\ Maint(Furnace\ 28)} = \frac{MH\ X\ [4\ X\ 735]}{24} + \frac{NH\ X\ [735]}{24}$$

$$NO_{X\,OxyMaint(Furnace\,29)} = \frac{MH \times \left[4 \times 650\right]}{24} + \frac{NH \times \left[650\right]}{24}$$

Where:

$NO_{X\ Oxy\ Maint}$ = NO_X emission limit for an Oxyfuel Furnace during a Maintenance Day, in pounds per day.

$NO_{X\ Oxy\ Abn}$ = As defined in Paragraph 7.c.iii.2, NO_X emission limit for an Oxyfuel Furnace during an Abnormally Low Production Rate Day, in pounds per day.

MH = Hours of Maintenance during a Maintenance day (less than or equal to 24 hours per day)

NH = Normal Hours = 24 – MH

* * *

f. Monitoring: A CEMS, if available, shall be used to demonstrate compliance with the NO_X limits in Paragraph 7.c. through 7.e.. If the Facility does not have a CEMS when it is required to meet the limit in Paragraphs 7.c. through 7.e. above, compliance shall be demonstrated using data generated from annual stack tests complying with 40 C.F.R. Part 60 Appendix A Method 7E. If a CEMS Certification Event occurs, then the requirement to demonstrate compliance continuously with the limit for that Furnace will be suspended until Certification is completed (provided the seven-day test required for Certification is commenced the first Operating Day following the conclusion of the CEMS Certification Event).

g. ***

h. Recordkeeping: For any Operating Day that *[AGI]* is excluding emissions from the relevant Emission Rate 30-day Rolling Average, it shall record the date, the exception (Abnormally Low Production Rate Day, Furnace Startup, Control Device Startup, Malfunction, or Maintenance) under which it is excluded, a calculation of the applicable limit (pounds per day) according to the equations above, and the recorded emissions according to the CEMS (pounds per day). For any Operating Day excluded for Maintenance, *[AGI]* shall record the total number of hours during which Maintenance occurred.

i. Recordkeeping and Reporting during Furnace Startup: In addition to the record keeping in Subparagraph h. above, during the applicable Furnace Startup period phases *[AGI]* must also keep the following records:

   i. For the Initial Heating Phase –

      1. Total natural gas usage in that Furnace (in million standard cubic feet)

   ii. For the Refractory Soak and Seal Phase –

      1. Total natural gas usage in that Furnace (in million standard cubic feet);
      2. Excess oxygen percentage at the Furnace exhaust flue (as determined by handheld monitor once per shift);
      3. Hot Spot Temperature (measured once per shift); and
      4. A certified statement asserting whether thermal blankets or similar techniques were used during this period.

   iii. For the Furnace Stabilization Phase –

      1. Total natural gas usage in that Furnace (in million standard cubic feet);
      2. Excess oxygen percentage at the Furnace exhaust flue (as determined by handheld monitor once per shift); and
      3. Average Hot Spot Temperature (measured once per shift).

j. Where a Facility has more than one Furnace subject to the same emission limit compliance with the 30-day rolling limits set forth herein may be determined by averaging the emissions from all Furnaces subject to the same emission limit at the Facility.

* * *

8. SO2 Emission Controls, Limits, and Compliance Schedule

   a. Interim SO_2 Emission Limit: *[The requirements of Paragraph 8.a. have been satisfied and superseded by Condition 2.2.A.3]*

      * * *

   b. SO_2 Emission Controls and Compliance Schedule *[The requirements of Paragraph 8.b. have been satisfied]*

      * * *

   g. *[The requirements of Paragraph 8.g. have been satisfied]*

   h. Monitoring: A CEMS shall be used to demonstrate compliance with the SO_2 limits in Paragraph 8.g. using data generated by the SO_2 CEMS. If a CEMS Certification Event occurs, then the requirement to demonstrate compliance continuously with the limit for that Furnace will be suspended until Certification is completed (provided the seven-day test required for Certification is commenced the first Operating Day following the conclusion of the CEMS Certification Event).

   i. ***

   j. Recordkeeping: For any Operating Day that *[AGI]* is excluding emissions from the relevant Emission Rate 30-day Rolling Average, it shall record the date, the exception (Abnormally Low Production Rate Day, Furnace Startup, Furnace Malfunction, Furnace Maintenance, or Color Transition) under which it is excluded, a calculation of the applicable limit (pounds per day) according to the equations above, and the recorded emissions according to the CEMS, if a certified CEMS is available (in pounds per day).

   k. Recordkeeping and Reporting during Furnace Startup: In addition to the record keeping in Subparagraph j. above, during all Furnace Startup phases *[AGI]* must also keep the following records:

      i. During the startup period, *[AGI]* will record the amount of sulfur added to the batch materials in pounds per ton of total batch material.

   l. ***

   m. *[addressed in Section 2.2 A.3]*

   n. Compliance with a Sulfuric Acid Mist emission limit of 1.0 pounds per ton of glass produced shall be demonstrated by a stack test performed using Conditional Test Method 13A or B on or before December 31, 2011. Stack testing shall be required to be performed after this initial test only once during the life of each Title V permit renewal. [*The initial testing has been satisfied*.]

9. PM Emission Controls, Limits, and Compliance Schedule

   a. Interim PM Emission Limit: [*This condition has been satisfied*.]

   b. PM Emission Controls and Compliance Schedule

      i. *These requirements have been met.*

   * * *

   f. PM Emission Limits for Furnaces *[#28 and #29*]

      i. For each Furnace …, *[AGI]* shall comply with the PM emission limit of 1.0 pound of total PM per ton of glass produced for each Furnace … .

      ii. Compliance with the PM limits in Paragraph 9.f.i. shall be demonstrated by annual stack tests. Total PM shall be determined using Method 5 (40 C.F.R. Part 60 Appendix A) and EPA Method 202 (40 C.F.R. Part 51 Appendix M). Compliance with this limit shall be measured by a stack test …. once per Calendar Year thereafter.

   * * *

h. Wilson PM Emission Limits – … *[AGI]* shall comply with a PM emission limit of 172.5 tons of total PM per year for … Furnaces #28 and #29 combined, calculated on a Calendar Year basis. Compliance with this limit shall be demonstrated with annual stack tests using EPA Method 5 and Method 202 (40 C.F.R. Part 60 Appendix A). … testing shall be conducted ….once each Calendar Year … . Compliance with the annual ton per year emission limit shall be calculated by summing the results of the following equation for each Furnace:

$$PM = \left[\frac{PastTest \times 1stProd}{2000}\right] + \left[\frac{NewTest \times 2ndProd}{2000}\right]$$

Where:

PM = PM Emissions (tpy)

PastTest = Last Source test result (lb/ton).

NewTest = New test from the year for which emissions are being calculated (lb/ton).

1stProd = Production from January 1st through the Day prior to the Day the new source test is commenced (tons of glass).

2ndProd = Production from the Day of the new source test through the end of that same Calendar Year (tons of glass).

Note: If *[AGI]* elects to do more than one test in a year, emissions calculated on the Days following the second test, will be based on that second test.

i. Existing State/Local Limits – The limits in Paragraph 9 do not replace any current State/local limits and do not relieve *[AGI]* of its obligation to comply with those limits.

* * *

k. Where a Facility has more than one Furnace subject to the same emission limit, but routed to different stacks, compliance with the pounds per ton stack test limits set forth herein may be determined by averaging the emissions from Furnaces subject to the same emission limit at [*the*] Facility. The average of the stack test results would be calculated on a weighted average by taking the source test from each unit and multiplying by the actual production of that unit in that year and dividing by the total Facility-wide production for that year. Then the resulting weighted numbers would be calculated for each additional Furnace and added together to calculate the combined pounds of emissions per ton of glass for the Facility.

* * *

10. **Abnormally Low Production Rate Days -** The following values shall be used to determine Abnormally Low Production Rate Days for each Furnace.

Table 6 – Abnormally Low Production Rate Day Thresholds

Facility and Furnace	Abnormally Low Production Rate Day Threshold * (tons/day)
Wilson, NC – Furnace #28	*[198]* *[This value has been revised per application no. 9800155.14E]*
Wilson, NC – Furnace #29	175

* Unless capacity subsequently increases as authorized by a revised permit limit. If production is increased by a Permit, the Abnormally Low Production Rate Day Threshold would be 35 percent of the new permitted production (or design production, where there is no permitted production) as determined on a daily basis (for the purpose of defining the Abnormally Low Production Rate Day Threshold).

* * *

12. Good Operation - At all times, including periods of Abnormally Low Production Rate Days, Furnace Startup, Control Device Startup, Malfunction, Maintenance, and Color Transition, *[AGI]* shall, to the extent practicable, maintain and operate all Furnaces and all control devices in a manner consistent with good air pollution control practice for minimizing emissions.

13. Maintenance

    a. Scheduled or preventative Furnace Maintenance, including checker raking and burning, shall not exceed ninety-six (96) Operating hours annually.

    * * *

14. Source Testing – Each source test shall be conducted in accordance with the requirements of the specified test method and shall be performed under representative operating conditions and shall not be conducted during periods of Abnormally Low Production Rate Days, Furnace Startup, Control Device Startup, Malfunction of the Furnace or relevant control system, Maintenance of the Furnace or relevant control system, or Color Transition.

15. Installation, Calibration, Certification, Maintenance, and Operation of CEMS and COMS

    a. *[This requirement has been met.]*

    * * *

    c. *[AGI]* shall install, calibrate, certify, maintain, and operate NO_X and SO_2 CEMS as required by Paragraph 15.a. as follows:

        i. Subject to Paragraph 15.c.ii., the NO_X and SO_2 CEMS shall monitor continuously and record the hourly NO_X and SO_2 emission concentration (parts per million) during each Operating Day from each Furnace (or Furnaces where more than one Furnace subject to the same emission limit is routed through a common exhaust stack). The CEMS shall calculate and record in units of parts per million of NO_X and SO_2 emitted.

        ii. The CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 2) and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures).

    d. Where the Consent Decree requires the use of CEMS to determine an emission rate (pound per ton or ton per year), then *[AGI]* is required to either:

        i. Follow requirements set forth above in 15.c. for the CEMS and then use an EPA approved method for calculating flow. In conjunction with the EPA approved flow method calculation, the data acquisition and handling system for the CEMS shall convert the ppm values into pound per hour values where the limit is expressed in pounds of pollutant per ton of glass produced. At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per day for valid CEMS hourly data by the total tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per ton emission rate for the Operating Day. This number shall be recorded in units of pounds of pollutant per ton of glass produced; or

        ii. Install, calibrate, certify, maintain, and operate NO_X and SO_2 Continuous Emission Rate Monitoring System (CERMS) as follows:

            1. The CERMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 6), and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures);

2. *[AGI]* must comply with all monitoring, record keeping and reporting requirements in 40 C.F.R. § 60.13 and 40 C.F.R. Part 60 Appendix B (Performance Specification 6); and

3. In conjunction with the flow rate monitoring device, the data acquisition and handling system for the CEMS shall convert the ppm values into pound per hour values where the limit is expressed in pounds of pollutant per ton of glass produced. At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per day for valid CEMS hourly data by the total tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per ton emission rate for the Operating Day. This number shall be recorded in units of pounds of pollutant per ton of glass produced for the applicable Day.

e. *[AGI]* shall install, calibrate, certify, maintain, and operate a COMS as required by Paragraph 15.a. as follows:

i. *[AGI]* shall install, calibrate, certify, maintain, and operate continuously a COMS during each Operating Day as required by Paragraph 15.a. in accordance with Performance Specification 1 of 40 C.F.R. Part 60 Appendix B; and

ii. *[AGI]* must comply with all monitoring, record keeping and reporting requirements in 40 C.F.R. § 60.13 and 40 C.F.R. Part 60 Appendix B (Performance Specification 1).

IX. REPORTING REQUIREMENTS

35. *[AGI]* shall submit the following reports:

a. Until the termination of this Consent Decree, *[AGI]* shall submit to EPA and to the Affected States an annual progress report no later than March 1 of each year. Each annual progress report shall contain the following information with respect to the Calendar Year preceding its submission:

i. Work performed and progress made toward implementing the requirements of Section IV (*of the Consent Decree*);

ii. Except for Calendar Year 2009, actual annual emissions of SO_2, NO_X and PM from each Furnace measured using CEMS, or if no CEMS, the most recent source test(s);

iii. Any significant problems encountered or anticipated in complying with the requirements of Section IV (*of the Consent Decree*), together with implemented or proposed solutions;

iv. Unless previously provided, final testing reports from tests conducted pursuant to this Consent Decree that reflect an accurate summary of emissions from a Furnace as compared to the Consent Decree requirement;

v. Status of permit applications and a summary of all permitting activity pertaining to compliance with this Consent Decree; and

vi. With respect to the first annual report, the SEP reports required by Paragraph 24 *(of the Consent Decree)*.

b. A copy of any reports to Affected States pertaining to compliance with this Consent Decree shall be provided to EPA either at the time of submission to the Affected State or in the annual report.

c. If *[AGI]* violates, or has reason to believe that it may have violated, any requirement of this Consent Decree, *[AGI]* shall notify the United States and the Affected State of such violation and its duration or anticipated likely duration, in writing and by telephone, email or facsimile, within ten (10) business days of the time *[AGI]* first becomes aware of the violation or potential violation. The notice should explain the violation's likely cause and the remedial steps taken, or to be taken, to prevent future violations. If the cause of a violation cannot be fully explained at the time notice is given, *[AGI]* shall so state in the notice. After notice is given, *[AGI]* shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) Days of the Day *[AGI]* becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves *[AGI]* of its obligation to provide the notice required by Section XII of this Consent Decree (Force Majeure).

d. Whenever any violation of this Consent Decree or any other event affecting *[AGI]*'s performance under this Decree, or the performance of any of its glass manufacturing Facilities, may pose an immediate threat to the public health or welfare or the environment, *[AGI]* shall notify EPA and the Affected State, orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after *[AGI]* first knew of, or should have known of, the violation or event.

36. As part of its annual reports, *[AGI]* shall provide EPA with a copy of any of the following which were produced in the preceding Calendar Year: each application for a Permit, or Permit amendment, to address or comply with any provision of this Consent Decree, as well as a copy of any Permit proposed as a result of such application.

37. All reports shall be submitted to the persons and in the manner designated in Section XVII (Notices).

38. Each report submitted by *[AGI]* under this Section shall be signed by a plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant operations of *[AGI]*, and shall include the following certification:

> I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowingly and willfully submitting a materially false statement.

39. The reporting requirements of this Consent Decree do not relieve *[AGI]* of any reporting obligations required by the Act or implementing regulations, or by any other federal, State, or local law, regulation, permit, or other requirement. The reporting requirements of this Section are in addition to any other reports, plans or submissions required by other Sections of this Consent Decree.

40. Any information provided pursuant to this Consent Decree may be used by the United States and any Affected State in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law and may be made available to the public upon request, if not otherwise protected as confidential business information, pursuant to 40 C.F.R. Part 2.

XVII. NOTICES

90. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, *[AGI]*'s submissions shall be deemed submitted on the date they are sent either by overnight delivery service or by certified or registered mail, return receipt requested. When *[AGI]* is required to submit notices or communicate in writing to the United States and the Affected State relating to one of the *[AGI]*'s Facilities, *[AGI]* shall also submit a copy of that notice or other writing to the United States and the Affected State for the Facility located in that State. Except as otherwise provided herein, when written notification or communication is required by this Consent Decree, it shall be addressed as follows, unless a Party notifies all other Parties in writing to provide notification to a different addressee:

As to the United States: - See Consent Decree

As to the U.S. Environmental Protection Agency: - See Consent Decree

With copies to the EPA Regional office where the relevant Facility is located:

EPA Region 4: - See Consent Decree

As to Plaintiff-Intervenor, the State of North Carolina:

All notices and reports required from *[AGI]* should be mailed, first class postage prepaid to:

Patrick Butler, Regional Air Quality Supervisor

Raleigh Regional Office

Department of Environment and Natural Resources

3800 Barrett Drive, Suite 101

Raleigh, NC 27609

Additional Reporting Requirements

II. The Permittee shall, on a quarterly basis, consistent with 40 CFR 60.7(c), submit an excess emissions and monitoring system performance summary report. The report shall contain the information required per 40 CFR 60.7(c) and (d).

The quarterly reports, acceptable to the Regional Air Quality Supervisor, shall be postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

SECTION 3 - GENERAL CONDITIONS (version 5.1 08/03/2017)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]
The Permittee shall be subject to the following provisions with respect to emergencies:
1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and

readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
    a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
    b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
    c. the applicable requirements under Title IV; or
    d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain

such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.

2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.

4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound